



# MiniPID 2 HS

OEM Gas Sensor with State of the Art Sensing Technology



MiniPID 2 HS is designed to detect VOCs at sub ppb concentrations. Detection at these levels can be compromised by contamination from moisture, dust and aerosols. To overcome this, we have developed a world leading, patent pending, filter to protect the ionisation chamber.

## Key Features

- 0.5 ppb sensitivity
- 10,000 hours continuous lamp life
- Anti-contamination design
- Patent pending filter
- Humidity-resistant
- Serviceable electrode stack and lamp
- Intrinsically safe

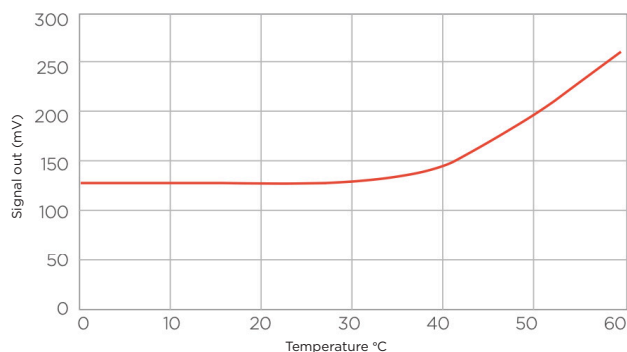
## Typical Applications

- Air quality monitoring
- Semiconductor fabrication
- Clean room
- Fertility labs
- Glove boxes
- HVAC

## Performance

Electrode Stack Colour	Red
Minimum Detection Limit	0.5 ppb
Range	>3 ppm
T90 Response Time (S)	<12
Sensitivity	>600 mV/ppm

Typical Background Drift



## Power & Signal

Supply Voltage (using internal regulator)	3.6 - 18 V (non intrinsically safe 10 - 18 V)
Supply Voltage (using a regulated power supply)	3 - 3.6 V
Current	20 - 32 mA (130 for 100 ms at start up)
Power Consumption	100 mW at 3.3 V
Output Signal (using internal regulator)	0 - 3.2 V
Output Signal (using a regulated power supply)	0 to rail voltage - 0.1 V

## Environmental

Temperature Range	0 to 40 °C
Relative Humidity Range	0 - 99% RH (non condensing)



## Lifetime & Warranty

Sensor Life	>5 years
Lamp Life	10,000 hours
Warranty	10.6 eV lamp and MiniPID 2 Body = 12 months

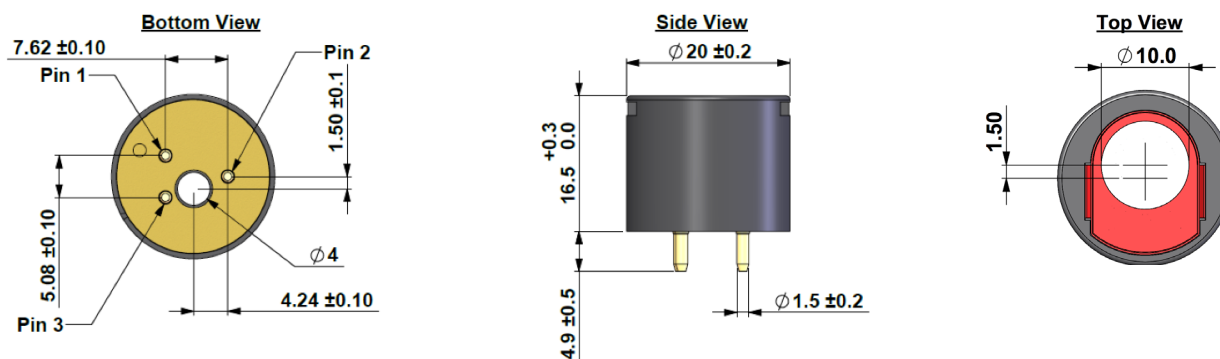
## Order Code                      Intrinsically Safe                      Supply Voltage

MP3SHLHSAU2	✓	3.0V to 3.2V
MP3SHLHSBU2	✓	3.2V to 3.6V
MP3SHLHSCU2	✓	3.6V to 10.0V
MP3SHLHSNU2	✗	3.6V to 18.0V

## Patents & Certification

Patents	US 7.046.012 EC 1474681
Europe	ATEX II 1G Ex ia IIC Ga (-40 °C ≤ Ta ≤ +55 °C) @ 1.1W
Worldwide	IECEx II 1G Ex ia IIC Ga (-40 °C ≤ Ta ≤ +55 °C) @ 1.1W
North America	UL913 (8th) Edition Class I, II, III, Division 1 CSA-C22.2 No157-92
Eurasian Customs Union	№ EA3C RU C-GB.HA65.B.00635/20

## Drawings

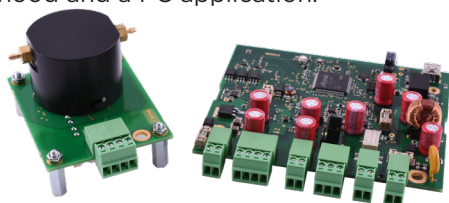


Dimensions in mm

## Sensor Development Kit (SDK)

Sensor Development Kit is used as an efficient way to test and integrate the ION Science photoionization detection sensors into any application.

SDK includes everything needed to run MiniPID 2 including an integration board, sensor board, gas delivery hood and a PC application.



## Other MiniPID 2 Sensors Available

ION Science is a leading manufacturer of VOC gas sensors, our PID sensor technology is trusted by major gas detection manufacturers globally. Other gas sensors from ION Science include:

- MiniPID 2 PPM WR
- MiniPID 2 PPM
- MiniPID 2 PPB WR
- MiniPID 2 PPB
- MiniPID 2 10.0 eV
- MiniPID 2 11.7 eV

